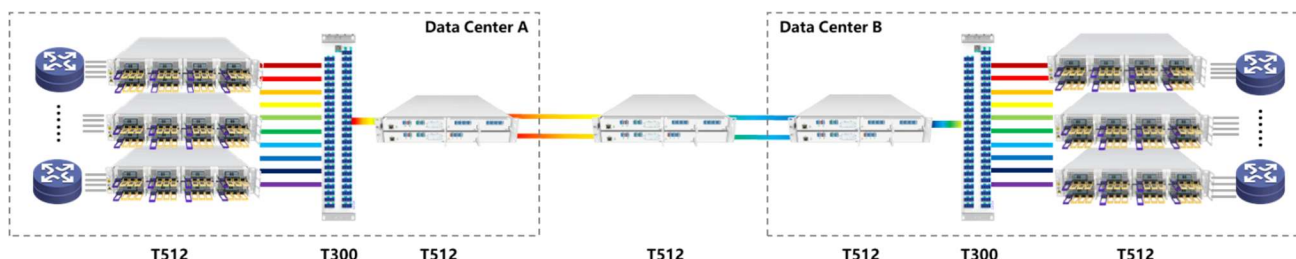


AX-802 DCI and Metro Core Product

AX-802 data center interconnect and metro core network products are industry-leading, modular, disaggregated, high-capacity next-generation optical transport equipment. Its flexible networking capabilities, variety of service interfaces, multiple power suppliers and same chassis for both transponders and optical line system make it suitable for large, medium and small data center interconnection, metro and wide area networks, as well as enterprise networks and computing center interconnection and backup. The equipment can form point-to-point WDM transmission, single span, multi-span, regeneration networks, FOADM or ROADM linear networks as well as full-mesh ROADM networks.

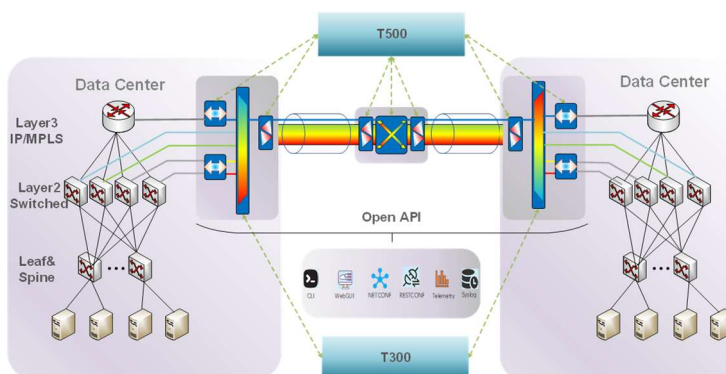
- 2RU chassis, 480mm in depth, supporting 4/8 service slots. The same chassis for both transponders and optical line system
- Supports 220V AC, high voltage DC, 48V DC power suppliers
- Support redundancy of main control, power supply and fan.
- Single chassis support total 3.2T transmission capacity with 200G/400G/800G/1.2Tb/s per wavelength coherent optical transmission technology in the modulation format of QPSK, 16 QAM and 64QAM coding modes
- Support 100GE, 100GE FlexE, OTU4, 10GE, OTU2, STM64, 10G WAN, 8G~32G FC and other service interfaces
- Flexible optical layer, support 32/48/96 waves, FOADM, and ROADM in C-band
- Support online OTDR/OCM diagnosis and 1588 clock synchronization
- Support protection of OTS, OMS, and OCH with absolute and relative threshold value
- Support 100M and 1Gigabit management channels with OSC signals
- Unified network management, providing NETCONF / CLI / TELEMETRY / OpenConfig for easy integration with 3rd party system



Typical application 1:

Multi-span point-to-point data center interconnection

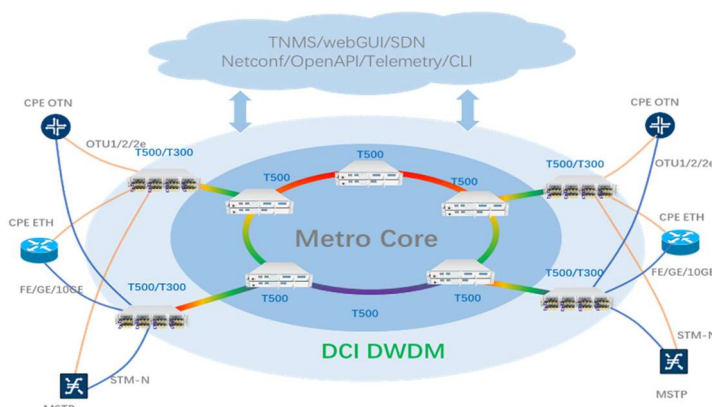
- 200G QPSK coherent transmission over typical 1500km fiber
- 400G 16QAM coherent transmission over typical 600km fiber
- Maximum link budget of 32dB for 120km per span
- Variety service interfaces of 100GE / 100GE FlexE / OTU4 / 10GE / STM64 / 10G-WAN / 8G~32G FC signals
- Support YANG-based APIs, which can be managed by Acrossoptics T010 network management or third-party SDN controller



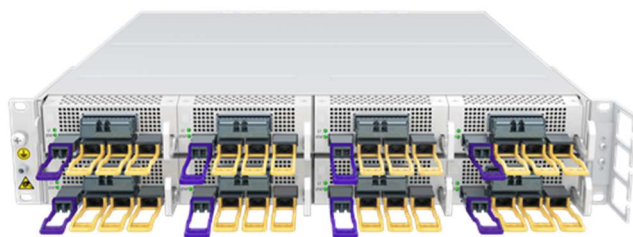
Typical application 2:

Ring-based metro core network

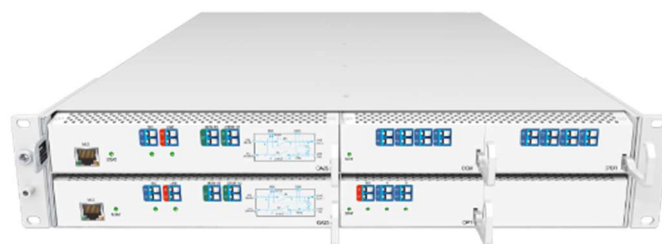
- Aggregate 100GE / FlexE / OTU4 / 10GE / OTU2 / Fiber Channel and low-speed services into 200G/400G per wavelength transmission
- Support FOADM/ROADM linear or ring DWDM network
- Support 48/96 wavelength dual-fiber optical line protection
- Support 100M / 1Gigabit management channels with OSC
- Support inline OCM/OTDR monitoring
- Support east-west 1588 clock synchronization
- Support YANG-based APIs, which can be managed by Acrossoptics T010 network management or third-party SDN controller



PRODUCT APPEARANCE



AX-802 Transponder/Muxponder Modules



AX-802 Optical Line Modules

TECHNICAL SPECIFICATIONS

Physical Dimensions

- 88 x 440x 480mm (h×w×d)
- Width: 19/21 inch rack
- Height: 2U

System Configuration and Modularity

- Eight single slot sleds or four dual-slot sleds
- All slots are field replaceable and hot swappable
- Same chassis for both transponders and OLS

Line Side Interfaces

- Support 200G QPSK codec, pluggable CFP2-DCO
- Support 400G 16 QAM codec, pluggable CFP2-DCO
- Support 191.3~196.1THz, 50/75/100G spacing

Client Side Interfaces

- Support 4xQSFP28, 2xQSFP28, 20xSFP+, 1x QSFP28 + 10xSFP+ and etc
- Support 100GE / 100GE FlexE / OTU4 / 10GE / OTU2 / STM-64 / 10G WAN / 8G FC / 10G FC / 16G FC / 32G FC and etc.

Optical Line Modules

- Optical terminal and line amplifiers support 8~15dB, 15~25dB, 22~35dB gain
- Support inline OCM, OTDR monitor with 1% tap
- Support Optical Supervision Channel (OSC)
- Support TFF-based 10 types of 4-channel FOADM
- Support twin 9D WSS ROADM
- Support OTS、OMS、OCH protection
- Support protection based on relative and absolute threshold values with switch time less than 10ms

Electrical Power and FANS

- AC power: 90 ~ 264V 50/60Hz
- DC power: -36 ~ -72V
- 240VHDC: 180 ~ 300VHDC
- 1+1 PSU redundancy and field-replaceable
- 2+1 FAN redundancy and field-replaceable
- Air flow: Front-to-back straight-through

Timing and Synchronization

- Support IEEE 1588-2008; IEEE 1588-2019
- Support ITU-T G.8271.1, G.8273.2, G.8275.1/2, G.8261/62/63/64

Management and Console Ports

- RJ-45 Network Management interface
- YANG-based Netconf API
- CLI / SNMP / TNMS

Regulatory and Compliance

- RoHS10/REACH/WEE
- IEC/EN 60950-1, IEC/EN 60825
- EN55022/EN55024, IEC 61000-3/ IEC 61000-4
- Laser Safety: IEC 60852 Class1/2

Environmental

- Working Temperature: 0°C ~ +40°C/32°F ~ 104°F
- Storage Temperature: -40°C ~ +85°C/-40°F ~ 185°F
- Humidity: 5% ~ 90%

Ordering Guide

Items	Part Number	Description
Chassis	AX-802-CHASBD-00	Bundled chassis with controllers, fans and DC PSUs
	AX-802-CHASBA-00	Bundled chassis with controllers, fans and AC PSUs
	AX-802-CHASZZ-00	Chassis: 88 x 440x 480mm (h×w×d) for racks with 600mm in depth
	AX-802-FANZZZ-00	Fan module, supporting 2+1 redundancy for short time
	AX-802-AUXPAL-00	I/O module for local console and multi-chassis management
	AX-802-PSUDCZ-00	48V DC power module, supporting 1+1 redundancy with load balance. Power consumption 800W
	AX-802-PSUHVH-00	220V AC and 240HDC power module, supporting 1+1 redundancy with load balance. Power consumption 1300W
	AX-802-PSUHVH-00	220V AC and 240HDC power module, supporting 1+1 redundancy with load balance. Power consumption 800W
	AX-802-EMUPZZ-00	Main controller module, supporting 1+1 redundancy and hot pluggable without affecting traffic
	AX-802-EMUZZZ-00	Main controller module, not supporting 1+1 redundancy
	AX-802-QUARFI-00	filler card, 1/4 slot sled
Transponder/ Muxponder	AX-802-4T4CTZ-00	4x100G Muxponder, 1/4 slot sled, Client side supporting 4x100G with 100GE and OTU4 dual rates; Line side is 400G CFP2-DCO
	AX-802-2T2CTZ-00	2x100G Muxponder, 1/4 slot sled, Client side supporting 2x100G with 100GE and OTU4; Line side is 200G CFP2-DCO
	AX-802-2TXXTZ-00	100G/10G Muxponder, 1/2 slot sled, Client side supporting 20x10G or 100G+10x10G with 100GE/10GE and OTU2 rates; Line side is 200G CFP2-DCO pluggable
	AX-802-8T8CTZ-00	100G/400G muxponder, 1/4 slot sled, Client side supporting 2x400G or 8x100G with 100GE and 400GE rates; Line side is 800G MSA
	AX-802-12T12C-00	400G muxponder, 1/2 slot sled, Client side supporting 3x400 Gwith 400GE rates; Line side is 1200G MSA
	AX-802-4T4CZR-00	4x100G Muxponder, 1/4 slot sled, client side supporting 400GE and 100GE; line side supporting 400G ZR pluggable
Pluggable Optical Modules	AOPP-4CFP2D-01	CFP2-DCO, 400G pluggable module, support client 100GE and OTU4
	AOPP-2CFP2D-00	CFP2-DCO, 200G pluggable module
	AOPP-1Q8CW4-00	QSFP28, 100G CWDM4 pluggable module
	AOPP-1Q8LR4-00	QSFP28, 100G LR4 pluggable module
	AOPP-1Q8LR4-10	QSFP28 100G OTU4&LR4 dual rate pluggable module
	AOPP-1Q8SR4-00	QSFP28 100G SR4 multi mode pluggable module
	AOPP-XSFSMZ-00	SFP+, 10G single mode pluggable module
	AOPP-XSFMZ-00	SFP+, 10G multi mode pluggable module

Items	Part Number	Description
Optical Line System (Card/Chassis)	AX-802-OAMP25-00	Terminal optical amplifier with built-in BA and PA, 1/2 slot sled. BA gain range 8~18dB; PA gain range 15~25dB
	AX-802-OAMP35-00	Terminal optical amplifier with built-in BA and PA, 1/2 slot sled. BA gain range 8~18dB; PA gain range 22~35dB
	AX-802-OLA25Z-00	Line optical amplifier with built-in LA1 and LA2, 1/2 slot sled. LA1 and LA2 gain range: 15~25dB
	AX-802-OLA35Z-00	Line optical amplifier with built-in LA1 and LA2, 1/2 slot sled. LA1 and LA2 gain range: 22~35dB
	AX-802-OLA35Z-10	Line optical amplifier with built-in LA1 and LA2, 1/2 slot sled. LA1 gain range:15~25dB;LA2 gain range:22~35dB
	AX-802-WS0925-00	Dual 9 degree WSS module with built-in BA and PA (VoA), 1/2 slot sled. BA gain range: 15~25dB; PA gain range 15~25dB
	AX-802-WS0935-00	Dual 9 degree WSS module with built-in BA and PA (VoA), 1/2 slot sled. BA gain range: 15~25dB; PA gain range 22~35dB
	AX-802-TF5659-00	TFF4 supporting 4 fixed wavelength add/drop, 1/4 slot sled
	AX-802-TF5255-00	TFF4 supporting 4 fixed wavelength add/drop, 1/4 slot sled
	AX-802-TF4750-00	TFF4 supporting 4 fixed wavelength add/drop, 1/4 slot sled
	AX-802-TF4346-00	TFF4 supporting 4 fixed wavelength add/drop, 1/4 slot sled
	AX-802-TF3841-00	TFF4 supporting 4 fixed wavelength add/drop, 1/4 slot sled
	AX-802-TF3437-00	TFF4 supporting 4 fixed wavelength add/drop, 1/4 slot sled
	AX-802-TF2932-00	TFF4 supporting 4 fixed wavelength add/drop, 1/4 slot sled
	AX-802-TF2528-00	TFF4 supporting 4 fixed wavelength add/drop, 1/4 slot sled
	AX-802-TF2023-00	TFF4 supporting 4 fixed wavelength add/drop, 1/4 slot sled
	AX-802-TF1619-00	TFF4 supporting 4 fixed wavelength add/drop, 1/4 slot sled
	AX-802-SOLPZZ-00	Single port optical protection module, 1/4 slot sled
	AX-802-DOLPZZ-00	Dual port optical protection module, 1/4 slot sled
	AX-802-OTDR8Z-00	OTDR module, 1/4 slot sled
	AX-802-OCM8ZZ-00	OCM module, 1/4 slot sled
	AX-802-PTMEST-00	Time signal OEO and transmission module (East side),1/4 slot sled
	AX-802-PTMWST-00	Time signal OEO and transmission module (West side),1/4 slot sled
	AX-901-OMD48Z-00	48 wavelength MuX/DeMux; Chassis height 1U
	AX-901-OMD96Z-00	96 wavelength MuX/DeMux; Chassis height 2U